Combat Service Support Element

Improved Expedient Fortification Construction (IEFC)

Purpose: Assess commercial-off-the-shelf (COTS) expedient fortification construction systems.

Background: The Marine Corps' current expedient fortification capability is the sandbag, which is manpower intensive and is one-time use. An "easy-to-build, scalable and reusable" force protection structure is needed in the rapidly changing asymmetric environment that our Marines operate. By leveraging modern materials and techniques, we can increase force protection



while decreasing the manpower hours needed to construct expedient fortifications. The Director, Logistics Plans, Policies and Strategic Mobility Division at Headquarters Marine Corps Installation and Logistics has asked the Lab to conduct experimentation in the areas of counter mobility and survivability, both of which fall under this initiative. Congressional support has been garnered with funding specifically allocated for experimentation with this innovative technology.

Description: The Rapid Deployment Fortification Wall (RDFW) made by GeoCell Systems Inc., is currently available through the GSA schedule. The material is a reusable, expandable, stackable, modular wall made of tough, lightweight, environmentally responsible plastic, engineered by Eastman Chemical to be used in lieu of sandbags. As a result of recently released congressional funding, this effort will be integrated with the MAGTF Utility Tractor-Tactical (MUTT) assessment being conducted in part at the Marine Corps Engineer School. Assessment will include construction of bunkers, revetments, obstacles, as well as looking into application for runway/roadway crater repair.

Deliverable Products: Prototypes, assessment reports and requirement documentation.



Action Officer: Capt Michele Kane 784-1089